

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of)	#93mg
* 1	Ramachandran, et al.)	U
Serial No.:	09/498,789) Art Unit: 3625	
Confirm. No.:	9304)	7(0) BOARI
Filed:	February 5, 2000) Patent Examiner:) Cuong H. Nguyen	RECE B) APR 28 AND INTER
Title:	Automated Transaction Machine	RECEIVED	EIVE B PH ENT AI
Board of Patent Appeals and Interferences Commissioner for Patents Washington, D.C. 20231		MAY 0 5 2003 GROUP 3600	D 2: 42 PPEALS

BRIEF OF APPELLANTS PURSUANT TO 37 C.F.R. § 1.192

Sir:

The Appellants hereby submit their Brief pursuant to 37 C.F.R. § 1.192, in triplicate, concerning the above-referenced Application.

REAL PARTY IN INTEREST

The Assignee of all right, title and interest to the above-referenced Application is Diebold, Incorporated, an Ohio corporation.

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RELATED APPEALS AND INTERFERENCES

Appellants believe that there are no related appeals or interferences pertaining to this matter.

STATUS OF CLAIMS

Claims 1-35 are pending in the Application.

Claims 1-35 were rejected pursuant to 35 U.S.C. § 103(a) as being unpatentable over Lipkin (US 5,592,377) in view of So (US 4,990,848) and Atkins (US 5,644,727) and Official Notice.

Claim 16 was rejected pursuant to 35 U.S.C. § 103(a) as being unpatentable over Lipkin in view of So and Atkins and Batson (US 5,844,327) and the Official Notice.

These rejections were the only rejections present in the Office Action ("Action") dated January 29, 2003, which was made Final. Appellants appeal the rejections of the claims, inclusive.

STATUS OF AMENDMENTS

A final rejection was made January 29, 2003. No amendments to the claims were requested to be admitted after the final rejection.

SUMMARY OF INVENTION

Overview of the Invention

An exemplary form of the invention is directed to an automated transaction machine (ATM) of the recycling currency type. The exemplary form of the machine is shown schematically in Figure 31. The machine permits a merchant to both store and withdraw cash. The machine also permits a customer to withdraw cash. The machine includes a common storage area for currency notes that may be dispensed to either the consumer and the merchant.

The machine includes a chest portion (334) and a top hat portion (336). The machine has a merchant user side and a customer user side (340). The merchant side (338) of the chest portion includes an inlet opening (342) for inserting cash and an outlet opening (344) for dispensing cash. The customer side of the chest portion also includes an outlet opening (346) for dispensing cash. The top hat portion includes a separate merchant interface (352) on the merchant side and a separate customer interface (354) on the customer side. The machine provides for the safekeeping of excess cash from a merchant's business operations. The machine enables the replenishment of cash therein without having to access the cash storage areas in the interior of the chest portion.

An authorized merchant user can be identified based on a correlation of the merchant's appearance and voice. The machine can receive merchant appearance data through a camera, and can receive audio input signals from the merchant through a microphone. One or more data stores include data corresponding to a plurality of authorized merchant users. The data for each authorized merchant user includes identity data corresponding to the merchant, image data corresponding to an appearance feature of the merchant, and voice data corresponding to a voice

feature of the merchant. The data store(s) which include this information are in operative connection with one or more processors. A processor can use the data to authorize a merchant user to operate a transaction function device, such as a currency dispenser.

A processor can resolve first identity data by identifying the merchant based on the merchant's captured image. The processor can also resolve second identity data based on the merchant's voice. Thereafter, the processor can compare the first and second identity data to determine if they both point to the same authorized merchant. Upon correlation, the processor can permit a merchant to operate a transaction function device of the machine.

CONCISE STATEMENT OF THE ISSUES PRESENTED FOR REVIEW

The questions presented in this appeal are:

- 1). Whether Appellants' claims 1-35 are unpatentable under 35 U.S.C. § 103(a) as being unpatentable over Lipkin in view of So and Atkins and the Official Notice.
- Whether Appellants' claim 16 is unpatentable over Lipkin in view of So and Atkins and Batson and the Official Notice.

GROUPING OF CLAIMS

No groups of claims stand or fall together. Every claim recites additional features of the invention which distinguishes the claim over every other pending claim.

Each of Appellants' claims recites at least one element, combination of elements, or step not found or suggested in the applied references, which patentably distinguishes the claims.

The pending claims include eleven independent claims (claims 1, 14, 18, and 25-32).

Claims 2-13 depend from claim 1. Claims 15-17 depend from claim 14. Claims 19-24 depend from claim 18. Claims 33-35 depend from claim 30. All pending claims 1-35 are reproduced in the Appendix.

ARGUMENT

The Applicable Legal Standards

Before a claim may be rejected on the basis of obviousness pursuant to 35 U.S.C. § 103, the Patent Office bears the burden of establishing that all the recited features of the claim are known in the prior art. This is known as *prima facie* obviousness. To establish *prima facie* obviousness, it must be shown that all the elements and relationships recited in the claim are known in the prior art. If the Office does not produce a *prima facie* case, then the Appellants are under no obligation to submit evidence of nonobviousness. MPEP § 2142.

The teaching, suggestion, or motivation to combine the features in prior art references must be clearly and particularly identified in such prior art to support a rejection on the basis of obviousness. It is not sufficient to offer a broad range of sources and make conclusory statements. *In re Dembiczak*, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999).

Even if all of the features recited in the claim are known in the prior art, it is still not proper to reject a claim on the basis of obviousness unless there is a specific teaching, suggestion, or motivation in the prior art to produce the claimed combination. *Panduit Corp. v. Denison Mfg.*Co., 810 F.2d 1561, 1568, 1 USPQ2d 1593 (Fed. Cir. 1987). *In re Newell*, 891 F.2d 899, 901, 902, 13 USPQ2d 1248, 1250 (Fed. Cir. 1989).

The evidence of record must teach or suggest the recited features. An assertion of basic knowledge and common sense not based on any evidence in the record lacks substantial evidence support. *In re Zurko*, 258 F.3d 1379, 59 USPQ2d 1693 (Fed. Cir. 2001).

It is respectfully submitted that the Action from which this appeal is taken does not meet these burdens.

The Lipkin Reference

Lipkin is directed to a check cashing system. Communication between a person seeking to cash a check and a remote operator (or teller), who determines whether to cash the check, occurs through a telephone handset and camera/monitor arrangement. The remote system enables a check cashing decision to be made by the remote operator based on identical factors that are in place when an operator makes a decision to cash a check at a manually staffed check cashing agency (col. 2, lines 6-11).

The Lipkin check cashing system includes plural customer stations (18) connected to a remote operator station (12). Each customer station includes a telephone handset (26) which can be used to communicate with the operator at the operator station. The customer station includes a camera (28) and a video monitor (30). The customer station also includes an identification

module (36) which is used to provide a video image to the operator of a document such as a check, that the customer wishes to show to the operator. This is done to try to obtain the operator's preliminary approval to cash a check. The customer station further includes a check identification and storage module (42). The check identification and storage module is capable of reading the MICR (magnetic ink) coding on a check, imaging the face of the check, and storing the check in a vault (18) at the customer station. The customer station also includes a currency dispenser that can be operated remotely by the operator to dispense currency to the customer (col. 3, lines 4-43).

In operation of the Lipkin system the customer approaches the customer station and raises the handset (26) to alert the operator that the customer is present. The operator energizes the camera (28) at the customer station so the operator may view a video image of the customer. The operator also actuates a video camera at the operator station so that an image of the operator is displayed on a video monitor at the customer station. The operator may also enable the customer to access the customer identification module (36). The customer places the check to be cashed into the identification module. The identification module includes cameras for imaging both sides of the inserted check. Images of the front and rear of the check appear on a monitor at the operator station (col. 5, lines 7-20).

The customer then withdraws the check from the identification module (36). If the operator is willing to cash the customer's check the operator enables access to the check identification and storage module (42). The operator instructs the customer through the telephone handset to input the check into the module (42). The check identification and storage module provides the operator with an image of the front of the check and scans the check for

MICR coding. The operator views an image of the front of the check on a monitor at the operator station to be sure it is the same check that was previously inserted into the identification module (36). The operator may control the check identification and storage module to return the check to the customer if the operator does not wish to accept it (col. 5, lines 21-36). If the operator makes the decision to accept the check, the operator calculates the check cashing fee and displays the fee and the net amount the customer is going to receive on a video monitor at the customer station. If the customer tells the operator that he or she wishes to go forward with the transaction, the operator controls the cash dispenser (44) at the customer station to provide the customer with the net amount the customer is entitled to receive. The check is moved responsive to control by the operator through the check identification and storage module (42) into a storage area (48). A receipt is printed for the customer and delivered at the customer station (col. 5, lines 37-47).

In the operation of Lipkin, if the operator does not know the customer from previous transactions, the operator may access four databases (158, 160, 162, 164) which contain information that can help the operator decide whether to approve the transaction. One database (158) has images of customer signatures; another database (160) stores customer images; another database (162) includes images of previously cashed checks; and another database (164) has customer social security numbers, employment histories, birthdays, names of children, names of parents and other personal information that is likely to be known only by the person whose name is associated with the data (col. 4, line 59 - col. 5, line 3).

During a check cashing transaction the operator can access the information in the databases related to the name of the person that is provided by the individual seeking to cash the

check. This enables the operator to make a judgment whether the person attempting to cash the check is who they represent to be and whether the person is a good risk. This can include having the operator view an image in the database (160) corresponding to the name given by the person at the customer station (col. 5, lines 57-59). The operator can then make a decision from the video image of the person at the customer station and the customer image previously stored, whether the person seeking to cash the check is giving the correct name (col. 2, lines 3-11).

The So Reference

So is directed to a telephone signal type dual tone multi-frequency (DTMF) receiver that more readily discriminates "touch tone" signals (which are combinations of two simultaneous tones) from other noise present on a transmission line. These DTMF tones each include one low frequency tone and one high frequency tone. Each combination of the two tones represents a digit (col. 3, lines 27-44).

The device of So has a high tone band pass filter (16) which passes frequencies included among the high tones of the DTMF combinations. A low tone band pass filter (14) passes frequencies in the range of the lower tones of the DTMF combinations. Each band pass filter outputs five signals. In the case of the low pass filter, a first output (LY) represents the strength of the entire signal passed through the filter. Four other signals (LY1-LY4) correspond to the intensity of the filtered signal at the four preselected frequencies of interest, which correspond to the four possible low frequency DTMF components (col. 3, lines 55-64). These outputs are presented as five digital signals for each sample period which lasts about ¼ milliseconds (col. 7, lines 17-21).

In the case of the low pass filter the LY signal is passed to a minimum threshold checker (24) to determine if the signal is of sufficient strength to warrant further processing. If the total signal strength is not above the threshold, any further analysis of that set of signals is aborted (col. 7, lines 22-28).

The LY value is applied to an energy detector/time test template generator (30) which accumulates three 10 millisecond samples of the total strength signal. These three samples are referred to as a time domain test template (col. 7, lines 35-43).

The LY1-LY4 values are transmitted to a frequency domain detector/test template generator (34) which samples each of these signals every 250 milliseconds and counts the number of times each of these signals exceeds a threshold in a 40 millisecond period. The frequency domain detector/test template generator (34) produces a count corresponding to each of the LY1-LY4 signals based on the number of times during the sample period that each of the signals exceeds the threshold. These four counts are referred to as a frequency domain template (col. 7, lines 49-61).

Similar processing and analysis is done for the outputs of the high band pass filter which outputs values referred to as HY and HY1-HY4 (col. 7, line 62 - col. 8, line 4; col. 8, lines 34-44). This processing results in a time domain test template for the high band pass filter consisting of three samples, and a frequency domain template consisting of four counts at the four threshold values of interest for high frequency components of DTMF tones.

The system of So also compares to the peak magnitudes of the HY and LY values. These values are compared a number of times for differences which are referred to as "twist." If the

twist is too great, this suggests that the signal being received is not a two-tone DTMF signal and further analysis of the signal is aborted (col. 8, lines 5-15).

A recognition block (38) receives the two time domain test templates (which are each three samples of the LY and HY signals respectively) and two frequency domain templates (one of which is four counts indicating the number of times the LY1-LY4 values exceed a threshold and the other of which has four counts indicating the number of times that the HY1-HY4 values exceed a threshold). The recognition block compares these templates against respective reference templates to determine if a valid DTMF signal is received. This is done by comparing subsets of the values in the time domain test templates to values in reference templates, and determining if the compared values are above or below a set ratio (col. 8, lines 45-65). The comparison also involves selecting the peak value in each of the sample frequency domain templates. A noise value is calculated based on this peak value as are two "spillover thresholds" (col. 9, lines 1-21).

The recognition block (38) uses the calculated "spillover thresholds" to be sure that there is only one dominant frequency in each sample frequency domain template. This is done by checking to be sure that at least two of the values (of the four in each frequency domain template set) are below the spillover thresholds. If at least two of these values are not below the spillover threshold, a noise test is then done (col. 9, lines 21-33). The noise test calculates the sum of the nonprimary values in each sample set and compares the sum to the calculated noise threshold which is based on the calculated noise value. If the sum of the other nonprimary values (three of the four values in the set) is above the noise floor then the set is rejected and further analysis aborted (col. 9, lines 35-43).

If the recognition block (38) through execution of its various algorithms makes the determination that a valid DTMF signal has been received, the digital value corresponding to the DTMF signal is generated (col. 9, lines 43-48). So states that the sampling rate of his exemplary embodiment is set to minimize the impact of human voice signals which may be concurrently transmitted on the phone line with DTMF signals (col. 6, lines 37-58). This capability makes So useful in connection with voice mail, voice detection, speech recognition and other systems which involve the transmission of both voice and DTMF signals (col. 14, lines 26-30).

The Atkins Reference

Atkins is directed to a computer system in which a user may track and control a variety of financial transaction activities. The system and method of doing business described in Atkins are based on a user receiving value based on the equity the person may have in a home that is subject to a mortgage, or other assets that the person may have (col. 13, lines 19-38). The Atkins reference mentions that transactions may be done by a person via ATM, debit card, credit card, "voice recognition system" or other system that can be tracked to an account (col. 29, lines 6-25). However there is no explanation of what this alleged "voice recognition system" is, how it works, or how it would be configured or operated.

Among the many statements in the Atkins reference is an example which states that a customer may authorize a transaction through a device. Once the transaction information is input, it is authorized through a process of customer verification which allows the transaction to be sent to a merchant (col. 57, lines 53-64). An example of this process of authorization indicates that it has three parts. In each part a comparison is made to data held in the customer's

terminal device (e.g., 646) for that particular customer, and which enables the particular customer owning that terminal device to operate it.

The three part verification test (Figure 14C) includes the user first providing a thumbprint to their terminal device. If this thumbprint corresponds to the stored data in the terminal for the terminal owner's thumbprint, the authorization process moves to a next step. The customer then provides a voice input, signature input, or handwriting input. This is then compared to the terminal owner's information which is stored in the terminal. If the comparison does not show a match, the terminal owner may bypass this step by inputting a first personal identification number (PIN). The third step in the verification is for the customer to provide to their terminal a video print such as an image of the customer's iris or hand. This data is then compared to the information concerning the owner of the terminal which is stored therein. If the customer cannot achieve a match in this step, the terminal will accept the input of a second PIN number which enables the user to bypass this step. Once all three tests for determining that the user is the owner of the terminal have been passed, the transaction may be authorized (col. 58, line 61 - col. 59, line 35, and Figure 14C).

The Official Notice

The Action (at page 6) states that "The Official Notice is taken here that other claims' limitations in above claims are obvious and known for one with skills in the art."

The Batson Reference

Batson is directed to optimizing power distributed in a broadband signal system. A priority task (116) may include a battery charging profile management routine responsible for modifying the battery charger output to optimize battery float levels versus temperature and to implement various charging schemes. While the battery is discharging, the routine can accumulate discharging amp-hours (col. 11, lines 45-49).

(iv) 35 U.S.C. § 103

The Appellants respectfully submit that the attempts to combine the teachings of the references are clearly attempts at hindsight reconstruction of Appellants' claimed invention, which is legally impermissible and does not constitute a valid basis for a finding of obviousness. *In re Fritch*, 22 USPQ2d 1780 (Fed. Cir. 1992). The rejections, which lack the necessary evidence and rationale, are based on knowledge gleaned only from Appellants' disclosure. It follows that it would not have been obvious to have modified the references in the manner alleged. Furthermore, without a motivation to combine, which is the current situation, a rejection based on a *prima facie* case of obviousness is improper (MPEP § 2143.01).

Appellants traverse the rejections on the grounds that Appellants' claims recite features, relationships, and/or steps which are neither disclosed nor suggested in the cited art, and because there is no teaching, suggestion, or motivation cited so as to produce Appellants' invention. The features and relationships recited in Appellants' claims patentably distinguish over the applied references. Nor would it have been obvious to one having ordinary skill in the art to have combined the teachings of the references to have produced the recited invention. The Office

does not factually support any *prima facie* conclusion of obviousness. Thus, it is respectfully submitted that the 35 U.S.C. § 103(a) rejections are improper and should be withdrawn.

The Pending Claims Are Not Obvious Over <u>Lipkin in view of So and Atkins and the Official Notice</u>

Claims 1-35 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Lipkin in view of So and Atkins and the Official Notice.

Claim 1

The Lipkin reference does not teach or suggest numerous recited features and relationships. In Lipkin's system, a person seeking to cash a check provides their name through a telephone handset to an operator (or teller) who may look up a picture corresponding to the provided name to compare the person to the picture. The operator (not a processor) compares the information and makes a decision whether a check can be cashed (col. 2, lines 3-6; col. 5, lines 54-59). Even the Office Action dated August 19, 2002 admitted (on page 4, last paragraph) that "Lipkin teaches an operator is used instead of a processor." Nothing in Lipkin discloses a processor, in operative connection with an imaging device, that is operative responsive to image input signals to resolve first identity data as recited in claim 1. Likewise nothing in Lipkin discloses a processor, in operative connection with an audio input device, that is operative responsive to audio input signals from the voice of a user to resolve second identity data. Indeed nothing in Lipkin discloses or suggests resolving anything about the person's identity based on voice signals.

Nothing in Lipkin discloses or suggests comparing both identity data resolved from image data and identity data resolved from voice data for a level of correlation. Nothing in Lipkin

discloses or suggests that a merchant user is enabled to operate a transaction function device when a level of correlation between both first and second identity data is reached.

Lipkin is a manual system where an operator looks up information corresponding to one name given by a customer, and makes a determination as to whether a picture associated with that name is a picture of the person at the customer station. Lipkin does not teach or suggest a "processor" that is in operative connection with an imaging device, an audio input device, a data store, and a transaction function device. Nor does Lipkin teach or suggest that the "processor" makes the data comparison (or determination of correspondence).

In Lipkin a video monitor (114) at the operator station (12) displays an image of a customer transmitted by a camera (28) at the customer station (18). However, the video monitor (114) is not linked to the desktop computer (116). Thus, the desktop computer (116) is not "operative responsive to the image input signals to resolve first identity data." It follows that the desktop computer (116) cannot constitute the recited "processor."

Furthermore, Lipkin does not teach or suggest a financial transaction <u>machine</u> including a customer user side and a merchant user side, where the customer user side has a sheet opening and the merchant user side has a sheet opening. Lipkin has an operator station (12) connected to a plurality of customer stations (18). In Lipkin the operator is at a location <u>remote</u> from customers in customer stations (col. 1, lines 10-11). Lipkin does not teach or suggest the operator station and the customer stations at sides of the same financial transaction machine. Lipkin teaches away from the recited features. Lipkin does not teach or suggest the recited customer/merchant relationship.

Lipkin also does not teach or suggest a data store including stored <u>merchant</u> user data corresponding to a <u>plurality</u> of merchant users. Nor is Lipkin directed to comparing <u>merchant</u> user data. Lipkin specifically teaches that the plural customer stations (18) are for customers, and that a single operator station (12) is connected to the customer stations (18). That is, Lipkin distinguishes a <u>customer</u> station from the operator station. Lipkin is non analogous to comparing <u>merchant</u> user identity data to enable <u>merchant</u> user operation of a transaction function device.

The Action (page 6, first paragraph) admits that Lipkin does not teach or suggest "a processor couple to data storage can compare/identify user's data (audio & visual inputs) for a level of correlation to enable transaction function devices."

The teachings of So, Atkins, and the Official Notice do not teach or suggest the elements recited in Appellants' claim 1 which are not disclosed in Lipkin. For further example, where does either of these secondary references teach or suggest a data store including stored merchant user data corresponding to a <u>plurality</u> of merchant users, or comparing <u>merchant</u> user identity data to enable <u>merchant</u> user operation of a transaction function device? In addition, there is no teaching, suggestion, or motivation in the secondary references to combine their teachings either together or with the teachings of Lipkin so as to produce the recited invention.

So teaches a DTMF receiver which executes an algorithm which distinguishes DTMF signals from other noise on a transmission line. Nothing in So discloses or suggests identifying a person's identity in response to voice signals. So is non analogous art.

The Action further does not contain any citation to any teaching, suggestion or motivation for one having skill in the art to combine the teachings in So with the teachings of Lipkin.

Lipkin does not disclose or involve the use of DTMF signals. There is no use for any DTMF

signals in the operation of the system as described in Lipkin. For these reasons there is no teaching, suggestion or motivation for anyone to combine the teachings of So with the teachings of Lipkin.

For these reasons So adds nothing to the teachings of Lipkin and clearly does not provide any teaching or suggestion of the features and relationships recited in claim 1 which are lacking in the Lipkin reference. Furthermore, there is no teaching, suggestion, or motivation to combine any features of So with the teachings of Lipkin, as to do so would provide no useful purpose.

Atkins also does not provide any teaching or suggestion of the features that are specifically recited in claim 1 and which are absent in the Lipkin reference.

Atkins recites a terminal which includes an authorization procedure to be sure that the owner of the terminal is operating it. The procedure described in Atkins is to use a three part verification test by a user to check against corresponding data for the owner of that terminal. If all three tests are satisfied then the terminal is enabled to execute a transaction.

It is respectfully submitted that the teachings of Atkins are substantially the same as those of Lipkin. Atkins tests to see if input data from a user corresponds to data for the single authorized user stored in the terminal. The identity test is a one-to-one comparison, not a one-to-plurality comparison. That is, the test compares a single user data to a single user's stored data, not a user to a plurality of users. This is similar to the situation in Lipkin where the teller may look up a specific picture which corresponds to a specific name given by the person seeking to cash a check. If the input data in Atkins corresponds to the one user against whose data a test is made, the transaction proceeds. If the input data in Atkins does not correspond to this one user then the transaction does not proceed.

The Atkins device does not resolve first identity data or second identity data from a data store which includes data related to a <u>plurality</u> of users. Likewise, Atkins does not disclose or suggest to compare first identity data (based on a user's image) and second user identity data (based on a user's voice) for a level of correlation. Atkins checks each input against its stored data to make a "go/no go" determination. Because Atkins compares each single user's input against only that single user's stored data, there is no need to compare a resolved first identity data to a resolved second identity data for a level of correlation. In contrast, claim 1 permits each single user's input to be searched in a data store having a <u>plurality</u> of different user's data, with a further comparison of resolved first identity data to resolved second identity data for a level of correlation.

Where does Atkins compare two resolved data identities? Where does Atkins compare a resolved first identity data to a second resolved identity data for a level of correlation? Nothing in Atkins discloses or suggests comparing two items of information resolved responsive to two separate customer inputs for a level of correlation. Nor can Atkins alleviate the recited features not found in Lipkin.

Nor can the Official Notice alleviate the recited features not found in Lipkin. As previously discussed, the Action (at page 6, fourth paragraph) states that "The Official Notice is taken here that other claims' limitations in above claims are obvious and known for one with skills in the art." Nor has the Office indicated what prior art constitutes the Official Notice. Nor has the Office indicated where prior art pertaining to the Official Notice teaches or suggests the features lacking in Lipkin. The Action's "Official Notice" does not provide any known evidence whatsoever of the claimed features. Nor does the "Official Notice" provide any teaching,

suggestion, or motivation to combine features to produce the claimed invention. The record lacks substantial evidence support. *In re Zurko*, supra. It would not have been obvious to one having ordinary skill in the art to have modified Lipkin with the Official Notice to have produced the claimed invention.

Appellants respectfully submit that the references to Health Data Management, Linda Punch, and Lemelson are not part of the rejection. Nevertheless, even if they were in the rejection of claim 1, they could not alleviate the previously discussed deficiencies in Lipkin.

Health Data Management is non analogous to a financial transaction machine.

Furthermore, in Health Data Management it is physicians (not a processor) who compare images in "side-by-side comparisons" (page 1, paragraph 7). Furthermore, nothing in Health Data Management discloses or suggests comparing both identity data resolved from image data and identity data resolved from voice data for a level of correlation. Where does Health Data Management compare a resolved first identity data (from image data) to a second resolved identity data (from voice data) for a level of correlation?

Linda Punch teaches comparing a biometric feature of a customer to data encoded on the customer's card. Linda Punch is similar to Atkins. The comparison is one-to-one. Nor does Linda Punch teach or suggest comparing identity data resolved from image data to identity data resolved from voice data for a level of correlation.

Lemelson teaches comparing a feature of a customer to data on the customer's card.

Lemelson is similar to Linda Punch. Again, the comparison is one-to-one. Nor does Lemelson teach or suggest comparing identity data resolved from image data to identity data resolved from voice data for a level of correlation.

Furthermore, none of the applied prior art references, taken alone or in combination, teach or suggest a financial transaction <u>machine</u> including both a customer user side and a merchant user side, where the customer user side includes a sheet opening and the merchant user side includes a sheet opening. As previously discussed, Lipkin explicitly teaches and desires that the operator station be <u>remote</u> from the customer stations (col. 1, lines 10-11). That is, Lipkin teaches away from the recited features. It is unclear how Lipkin could be modified to have produced the recited invention. Since the Action does not explain the rejections with reasonable specificity, it also procedurally fails to establish a *prima facie* case of obviousness. *Ex parte Blanc*, 13 USPQ2d 1383 (Bd. Pat. App. & Inter. 1989). It would not have been obvious to one having ordinary skill in the art to have even attempted to have modified Lipkin to have included a financial transaction machine with both a customer user side and a merchant user side. Nor does the prior art suggest the desirability of the combination (MPEP § 2143.01), especially in view of Lipkin's express teaching (i.e., remote operator) against the alleged combination.

The Action is devoid of any teaching, suggestion, or motivation for combining the references to have produced the recited invention. The only suggestion for the recited features and relationships is found in Appellants' own novel disclosure. It follows that the alleged modification of Lipkin (and the rejection) is based on hindsight reconstruction of Appellants' claimed invention, which is legally impermissible and does not constitute a valid basis for a finding of obviousness. *In re Fritch*, supra. Even if it were somehow possible (which it isn't) to modify Lipkin in the manner alleged, the alleged modification would destroy the desired utility and operability of the Lipkin teaching. An obviousness rejection cannot be based on a combination of features in references if making the combination would result in destroying the

utility or advantage of the device shown in the prior art reference. *In re Fine*, 5 USPQ2d 1598-99 (Fed. Cir. 1988).

Furthermore, none of the applied prior art references, taken alone or in combination, teach or suggest a processor that is in operative connection with an imaging device, an audio input device, a data store, and a transaction function device. Nor do the applied prior art references, taken alone or in combination, teach or suggest a data store that includes merchant user data corresponding to a plurality of merchant users, especially where each merchant user data includes merchant user identity data, merchant user image data, and merchant user voice data.

Furthermore, as previously discussed, none of the applied prior art references, taken alone or in combination, teach or suggest a processor that can resolve first identity data (responsive to image input signals) and resolve second identity data (responsive to audio input signals). Nor do the applied prior art references, taken alone or in combination, teach or suggest that the processor can further compare the resolved first and second identity data for a level of correlation. It follows that none of the applied prior art references, taken alone or in combination, teach or suggest enabling merchant user operation of a transaction function device when the level of correlation is reached.

Neither Lipkin, So, Atkins, nor the Official Notice, taken alone or in combination, teach or suggest the features and relationships specifically recited in claim 1. The record lacks substantial evidence support. *In re Zurko*, supra. The Action does not factually support any *prima facie* conclusion of obviousness. Nor is there any teaching, suggestion, or motivation to combine features of the applied prior art references so as to produce the recited invention.

Appellants respectfully submit that neither Lipkin, So, Atkins, nor the Official Notice, taken alone or in combination, teach or suggest the recited features and relationships of claim 1. Thus, the 35 U.S.C. § 103(a) rejection should be withdrawn.

Claim 2

Claim 2 depends from claim 1. The Action is silent as to what constitutes the recited sensing device. The record lacks substantial evidence support. *In re Zurko*, supra. Nevertheless, neither of the references, taken alone or in combination, teach or suggest a proximity sensing device, or a processor that is operative to resolve a first identity data responsive to the sensing device sensing a merchant user in proximity to the financial transaction machine. Nor has the Office established a *prima facie* showing of obviousness.

Claim 3

Claim 3 depends from claim 1. Furthermore, neither of the references, taken alone or in combination, teach or suggest a <u>processor</u> (instead of an operator) that is operative to prompt (through an output device) a merchant user to speak, so that audio input signals are generated when the merchant user speaks. Nor has the Office established a *prima facie* showing of obviousness.

Claim 4

Claim 4 depends from claim 3. Furthermore, neither of the references, taken alone or in combination, teach or suggest a <u>processor</u> that is operative to prompt (through prompt outputs presented through a display) a merchant user to speak, whereby when the merchant user speaks audio input signals are generated. Where does Lipkin (or any of the secondary references) teach or suggest prompting a merchant user to speak via outputs presented through a display? In

Lipkin, "During the entire transaction, the customer and operator are in voice communication" (col. 5, lines 48-49). Where does Lipkin have any need to prompt a merchant user to speak? The Office has not established a *prima facie* showing of obviousness.

Claim 5

Claim 5 depends from claim 3. Furthermore, neither of the references, taken alone or in combination, teach or suggest a <u>processor</u> that is operative to prompt a merchant user to speak through prompt outputs presented through a speaker, whereby when the merchant user speaks audio input signals are generated, in the manner recited. Where does Lipkin (or any of the secondary references) teach or suggest prompting a merchant user to speak via outputs presented through a speaker? Where does Lipkin have any need to prompt a merchant user to speak? The Office has not established a *prima facie* showing of obviousness.

Claim 6

Claim 6 depends from claim 5. Furthermore, neither of the references, taken alone or in combination, teach or suggest a <u>processor</u> that is operative to prompt a merchant user to speak through prompt audio messages presented through a speaker. The Office has not established a *prima facie* showing of obviousness.

Claim 7

Claim 7 depends from claim 1. The Action is silent as to the recited features.

Nevertheless, neither of the references, taken alone or in combination, teach or suggest an output device and a manually actuatable input device, and a <u>processor</u> that is operative to prompt a

merchant user through the output device to operate the manually actuatable input device when a level of merchant user correlation is not reached. Nor has the Office established a *prima facie* showing of obviousness.

Claim 8

Claim 8 depends from claim 7. Furthermore, neither of the references, taken alone or in combination, teach or suggest a card reader, and that a merchant user is prompted to input a machine readable card associated with the merchant user in the card reader. There is no indication that the relied upon elements (76, 78) in Lipkin can read a card. Nor is there any indication of prompting a merchant user to input a machine readable card in a card reader. Why would Lipkin have any need of a card reader, or a prompt to input a machine readable card therein? Lipkin can read a check in the check identification module (42), but there is no indication that a card can be read in the customer identification module (36) just a viewing of the card. The Office has not established a *prima facie* showing of obviousness.

Claim 9

Claim 9 depends from claim 8. Furthermore, neither of the references, taken alone or in combination, teach or suggest that merchant user data has account data associated with each merchant user, and the machine readable card includes account identifying data corresponding to an account associated with a merchant user of the card, and the processor is operative to resolve the account of a merchant user responsive to the account identifying data. Nor has the Office established a *prima facie* showing of obviousness.

Claim 10

Claim 10 depends from claim 9. Furthermore, neither of the references, taken alone or in combination, teach or suggest a processor that can prompt a merchant user to input a code at a keypad, and the processor is operative to enable merchant user operation of a transaction function device responsive to keypad input of a predetermined code. The relied upon element (148) in Lipkin is a keyboard in the operator station (12), not a customer station. Nor is there any teaching or suggestion of inputting a code, especially for cashing a check in Lipkin. Nor has the Office established a *prima facie* showing of obviousness.

Claim 11

Claim 11 depends from claim 1. As previously discussed, neither of the applied references, taken alone or in combination, teach or suggest the recited features and relationships of claim 1. It follows that neither of the applied references, taken alone or in combination, teach or suggest that merchant user operation of a currency dispenser is enabled when a level of correlation between both first and second identity data is reached. It further follows that the Office has not established a *prima facie* showing of obviousness.

Claim 12

Claim 12 depends from claim 1. As previously discussed, neither of the applied references, taken alone or in combination, teach or suggest the recited features and relationships of claim 1. It follows that neither of the applied references, taken alone or in combination, teach or suggest the recited input terminal.

Claim 13

Claim 13 depends from claim 1. The Action is silent as to what constitutes the recited sensing device. The record lacks substantial evidence support. *In re Zurko*, supra. Nevertheless, neither of the references, taken alone or in combination, teach or suggest a proximity sensing device, or a processor that is operative to cease merchant user operation of a transaction function device responsive to the sensing device ceasing to sense the merchant user in proximity to the machine. It follows that the Office has not established a *prima facie* showing of obviousness.

Claim 14

Certain features and relationships of claim method of claim 14 similarly correspond to certain features and relationships of apparatus claim 1. Note Appellants' remarks in support of the patentability of claim 1.

Neither Lipkin, So, Atkins, nor the Official Notice, taken alone or in combination, teach or suggest the features and relationships specifically recited in claim 14. Neither Lipkin, So, Atkins, nor the Official Notice, taken alone or in combination, teach or suggest:

- providing a financial transaction machine, wherein the machine includes a
 customer user side and a merchant user side, wherein the customer user side
 includes a sheet opening, wherein the merchant user side includes a sheet opening,
- storing in a data store in operative connection with a processor, merchant user data for a plurality of merchant users, where the merchant user data includes:
 - identity data corresponding to an identity of each merchant user;
 - image data corresponding to an appearance feature of each merchant user;
 - voice data corresponding to a voice feature of each merchant user;

- acquiring with an imaging device on the transaction machine an appearance feature of a merchant user adjacent to the machine;
- resolving first user identity data from an appearance feature, resolving second user identity data from a voice feature, and comparing the resolved first and second user identity data with a processor to determine if such data corresponds to a single merchant user;
- enabling merchant user operation of a transaction function device on the machine when the first and second identity data corresponds to a single merchant user.

The record lacks substantial evidence support. *In re Zurko*, supra. Nor is there any teaching, suggestion, or motivation to combine features of the applied prior art references so as to produce the recited invention. The Office has not established a *prima facie* showing of obviousness.

Claim 15

Claim 15 depends from claim 14. The Action is silent as to what constitutes the recited steps. The record lacks substantial evidence support. *In re Zurko*, supra. Nevertheless, neither of the references, taken alone or in combination, teach or suggest comparing data (input by a merchant user through an input device) to data store input data, where correspondence of the data resolves the identity of a single merchant user. It follows that the Office has not established a *prima facie* showing of obviousness.

Claim 16

Claim 16 depends from claim 14. Claim 16 further recites that the storing step comprises prompting a merchant user through an input terminal to provide at least one of the image data or

voice data. Neither of the references, taken alone or in combination, teach or suggest prompting a merchant user in the manner recited. The Office has not established a *prima facie* showing of obviousness.

Furthermore, the Action (at pages 7-8) admits by inference that Lipkin in view of So, Atkins, and the Official Notice do not teach or suggest the recited method of claim 16. That is, the Action's additional reliance on Batson for claim 16 is taken as an admission by the Office that Lipkin in view of So, Atkins, and the Official Notice do not teach or suggest the recited method of claim 16.

Claim 17

Claim 17 depends from claim 14. The Action is silent as to what constitutes the recited sensing device. The record lacks substantial evidence support. *In re Zurko*, supra. Nevertheless, neither of the references, taken alone or in combination, teach or suggest a proximity sensing device, or preventing merchant user operation of a transaction function device responsive to the merchant user ceasing to be sensed in proximity to the machine. It follows that the Office has not established a *prima facie* showing of obviousness.

Claim 18

Certain features and relationships of claim 18 similarly correspond to certain features and relationships of apparatus claim 1. Note Appellants' remarks in support of the patentability of claim 1.

Neither Lipkin, So, Atkins, nor the Official Notice, taken alone or in combination, teach or suggest the features and relationships specifically recited in claim 18. Neither Lipkin, So, Atkins, nor the Official Notice, taken alone or in combination, teach or suggest:

- a transaction machine including a customer user side, a merchant user side, a
 characteristic input device, a manual input device, and a transaction function
 device, where the customer user side includes a sheet opening and the merchant
 user side includes a sheet opening;
- a processor in operative connection with a characteristic input device, a manual input device, and a data store, where the data store includes for each of a plurality of authorized merchant users:
 - feature data representative of the feature associated with the merchant user,
 - input data associated with a manual input corresponding to the merchant user,
- wherein the processor is operative to determine if input feature data (input through the characteristic input device by a merchant user in proximity to the machine) corresponds to data store feature data (associated with one of the plurality of authorized merchant users),
 - and if so to enable merchant user operation of the transaction function device,
 - and if not, to determine if manual input (by the merchant user through the
 manual input device on the machine) corresponds to the data store input
 data (associated with one of the plurality of authorized merchant users),
 and if so to enable merchant user operation of the transaction function
 device.

As previously discussed, Lipkin is a manual system where an operator looks up information corresponding to one name given by a customer, and makes a determination as to whether a picture associated with that name is a picture of the person at the customer station.

Lipkin does not teach or suggest a "processor" for a determination of correspondence. Nor does Lipkin teach, suggest, or have any need to determine if merchant user manual input corresponds to data store input data (associated with one of a plurality of authorized merchant users) to enable merchant user operation of a transaction function device. The record lacks substantial evidence support. *In re Zurko*, supra. Nor is there any teaching, suggestion, or motivation to combine features of the applied prior art references so as to produce the recited invention. The Office has not established a *prima facie* showing of obviousness.

Claim 19

Claim 19 depends from claim 18. As previously discussed, neither of the references, taken alone or in combination, teach or suggest a data store including data representative of both physical and vocal features of a plurality of authorized merchant users. Furthermore, as previously discussed, neither of the references, taken alone or in combination, teach or suggest that the merchant user feature data at the machine must correspond to both physical and vocal stored data of one authorized merchant user to enable a transaction function device to be operated. It follows that the Office has not established a *prima facie* showing of obviousness.

Claim 20

Claim 20 depends from claim 19. As previously discussed (e.g., claim 8), neither of the references, taken alone or in combination, teach or suggest a card reader, especially a card reader

that can read a card having identifying data corresponding to a merchant user. Again, the Office has not established a *prima facie* showing of obviousness.

Claim 21

Claim 21 depends from claim 20. As previously discussed (e.g., claim 10), neither of the references, taken alone or in combination, teach or suggest a keypad, where a merchant user is enabled to input a code through the keypad, and a transaction function device is enabled to be operated when the code and the identifying card data both correspond to the authorized merchant user. Again, the Office has not established a *prima facie* showing of obviousness.

Claim 22

Claim 22 depends from claim 18. As previously discussed, neither of the references, taken alone or in combination, teach or suggest that a <u>processor operates</u> an audio output device to prompt a merchant user to provide an input. It follows that the Office has not established a *prima facie* showing of obviousness.

Claim 23

Claim 23 depends from claim 22. Furthermore, neither of the references, taken alone or in combination, teach or suggest a suppression device, especially where a merchant user can selectively suppress audio to conduct a silent transaction. The relied upon element (28) in Lipkin is actually a camera. The record lacks substantial evidence support. *In re Zurko*, supra. Nor has the Office established a *prima facie* showing of obviousness.

Claim 24

Claim 24 depends from claim 23. Furthermore, neither of the references, taken alone or in combination, teach or suggest a processor that can store merchant user feature data in a data

store, responsive to selection of the suppression device. The Office has not established a *prima* facie showing of obviousness.

Claim 25

Certain features and relationships of claim 25 similarly correspond to certain features and relationships of apparatus claim 1. Note Appellants' remarks in support of the patentability of claim 1.

Neither Lipkin, So, Atkins, nor the Official Notice, taken alone or in combination, teach or suggest the features and relationships specifically recited in claim 25. As previously discussed, neither of the references, taken alone or in combination, teach or suggest a transaction machine including a customer user side and a merchant user side, with the customer user side including a sheet opening and the merchant user side including a sheet opening. Neither of the references, taken alone or in combination, teach or suggest a processor operative to resolve first and second identity data, compare the resolved first and second identity data for a correlation, and enable merchant user operation of a dispenser device when the correlation is reached.

The Office has not established a *prima facie* showing of obviousness. It would not have been obvious to one having ordinary skill in the art to have combined the teachings of the references to have produced the recited invention.

Claim 26

Certain features and relationships of claim 26 similarly correspond to certain features and relationships of apparatus claim 1. Note Appellants' remarks in support of the patentability of claim 1.

Neither Lipkin, So, Atkins, nor the Official Notice, taken alone or in combination, teach or suggest the features and relationships specifically recited in claim 26. As previously discussed, neither of the references, taken alone or in combination, teach or suggest the recited transaction machine. Neither of the references, taken alone or in combination, teach or suggest a data store including stored merchant user data corresponding to a <u>plurality</u> of merchant users. Neither of the references, taken alone or in combination, teach or suggest a processor operative to resolve first identity data, resolve second identity data, compare the resolved first and second identity data for correlation, and enable merchant user operation of a dispenser device when the correlation is reached. The Office has not established a *prima facie* showing of obviousness.

Claim 27

Certain features and relationships of claim 27 similarly correspond to certain features and relationships of apparatus claim 1. Note Appellants' remarks in support of the patentability of claim 1.

Neither Lipkin, So, Atkins, nor the Official Notice, taken alone or in combination, teach or suggest the features and relationships specifically recited in claim 27. As previously discussed, neither of the references, taken alone or in combination, teach or suggest the recited transaction machine. Neither of the references, taken alone or in combination, teach or suggest a processor operative to resolve identity data in the manner recited, nor enable merchant user operation of a dispenser device when the resolved identity data corresponds to an authorized merchant user. The Office has not established a *prima facie* showing of obviousness. It would not have been obvious to one having ordinary skill in the art to have combined the teachings of the references to have produced the recited invention.

Claim 28

Certain features and relationships of claim 28 similarly correspond to certain features and relationships of apparatus claim 1. Note Appellants' remarks in support of the patentability of claim 1.

Neither Lipkin, So, Atkins, nor the Official Notice, taken alone or in combination, teach or suggest the features and relationships specifically recited in claim 28. As previously discussed, neither of the references, taken alone or in combination, teach or suggest the recited transaction machine. Neither of the references, taken alone or in combination, teach or suggest a processor that is operative responsive to image and audio input signals to resolve merchant user identity data corresponding to a particular merchant user to operate an output device. The Office has not established a *prima facie* showing of obviousness. It would not have been obvious to one having ordinary skill in the art to have combined the teachings of the references to have produced the recited invention.

Claim 29

Certain features and relationships of claim 29 similarly correspond to certain features and relationships of apparatus claim 1. Note Appellants' remarks in support of the patentability of claim 1.

Neither Lipkin, So, Atkins, nor the Official Notice, taken alone or in combination, teach or suggest the features and relationships specifically recited in claim 29. As previously discussed, neither of the references, taken alone or in combination, teach or suggest the recited transaction machine. Neither of the references, taken alone or in combination, teach or suggest a processor that is operative to resolve user identity data (from a data store including user data of a

plurality of merchant users) corresponding to a particular merchant user to enable an output device to provide at least one output in the manner recited. The Office has not established a *prima facie* showing of obviousness. It would not have been obvious to one having ordinary skill in the art to have combined the teachings of the references to have produced the recited invention.

Claim 30

Certain features and relationships of claim 30 similarly correspond to certain features and relationships of apparatus claim 1. Note Appellants' remarks in support of the patentability of claim 1.

Neither Lipkin, So, Atkins, nor the Official Notice, taken alone or in combination, teach or suggest the features and relationships specifically recited in claim 30. As previously discussed, neither of the references, taken alone or in combination, teach or suggest the recited transaction machine including a customer user side with a sheet opening and a merchant user side with a sheet opening. Neither of the references, taken alone or in combination, teach or suggest a processor that is operative to determine an authorized merchant user to enable merchant user operation of a transaction function device in the manner recited. The Office has not established a *prima facie* showing of obviousness. It would not have been obvious to one having ordinary skill in the art to have combined the teachings of the references to have produced the recited invention.

Claim 31

Certain features and relationships of claim 31 similarly correspond to certain features and relationships of apparatus claim 1. Note Appellants' remarks in support of the patentability of claim 1.

Neither Lipkin, So, Atkins, nor the Official Notice, taken alone or in combination, teach or suggest the features and relationships specifically recited in claim 31. As previously discussed, neither of the references, taken alone or in combination, teach or suggest the recited transaction machine including a customer user side with a sheet opening and a merchant user side with a sheet opening. Neither of the references, taken alone or in combination, teach or suggest a processor that is operative to determine if image input signals correspond to an authorized merchant user, to enable the authorized merchant user operation of a transaction function device in the manner recited. The Office has not established a *prima facie* showing of obviousness. It would not have been obvious to one having ordinary skill in the art to have combined the teachings of the references to have produced the recited invention.

Claim 32

Certain features and relationships of claim 32 similarly correspond to certain features and relationships of apparatus claim 1. Note Appellants' remarks in support of the patentability of claim 1.

Neither Lipkin, So, Atkins, nor the Official Notice, taken alone or in combination, teach or suggest the features and relationships specifically recited in claim 32. As previously discussed, neither of the references, taken alone or in combination, teach or suggest the recited transaction machine including a customer user side with a sheet opening and a merchant user side

with a sheet opening. Neither of the references, taken alone or in combination, teach or suggest a processor that is operative to determine if audio input signals correspond to an authorized merchant user, to enable the authorized merchant user operation of a transaction function device in the manner recited. The Office has not established a *prima facie* showing of obviousness. It would not have been obvious to one having ordinary skill in the art to have combined the teachings of the references to have produced the recited invention.

Claim 33

Claim 33 depends from claim 30. Furthermore, neither of the references, taken alone or in combination, teach or suggest sheet inlet and outlet openings in a merchant user side of a chest portion, and a sheet outlet opening in a customer user side of the chest portion. Nor has the Office established a *prima facie* showing of obviousness.

Claim 34

Claim 34 depends from claim 33. Furthermore, neither of the references, taken alone or in combination, teach or suggest a housing in supporting connection with the chest portion, where both a customer interface and a merchant user interface are in supporting connection with the housing. Nor has the Office established a *prima facie* showing of obviousness.

Claim 35

Claim 35 depends from claim 34. Furthermore, neither of the references, taken alone or in combination, teach or suggest that the chest portion further comprises a sheet storage area in the manner recited. Nor has the Office established a *prima facie* showing of obviousness.

The Pending Claims Are Not Obvious Over Lipkin in view of So and Atkins and Batson and the Official Notice

Claim 16 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Lipkin in view of So and Atkins and Batson and the Official Notice.

Claim 16

Claim 16 depends from claim 14. Claim 16 further recites that the storing step comprises prompting a merchant user through an input terminal to provide at least one of the image data or voice data. Neither of the references, taken alone or in combination, teach or suggest prompting a merchant user in the manner recited.

Batson cannot alleviate the deficiencies lacking in Lipkin in view of So, Atkins, and the Official Notice. Batson also does not provide any teaching or suggestion of the features that are specifically recited in claim 16.

The Action's cited portion of Batson (col. 11, lines 45-49) has to do with a battery charger profile management routine which operates to modify a battery charging rate with temperature. However, nothing in Batson's power supply system is applicable to, usable in, or even pertains to the same field of technology. It follows that Batson is non analogous art. It would not have been obvious to one having ordinary skill in the art to have modified Lipkin and the secondary references with the additional teaching of Batson to have produced the recited method. The Office has not established a *prima facie* showing of obviousness.

Additional Comments

The Action on pages 1-3 provides additional comments in a "Response" section. With regard to parts 3A, 3C, and 3D, note Appellants' previous remarks concerning the Official Notice. As previously discussed in more detail above, it would not have been obvious to one having ordinary skill in the art to have modified Lipkin with the secondary references (including the Official Notice) to have produced the claimed invention.

In part 3B the Action alleges that certain terms used in apparatus claims "are functional data that have less weight in apparatus claims." The Appellants respectfully disagree. "There is nothing inherently wrong with defining some part of an invention in functional terms." "A functional limitation <u>must</u> be evaluated and considered, <u>just like any other limitation</u> of the claim, for what it fairly conveys to a person of ordinary skill in the pertinent art in the context in which it is used." MPEP § 2173.05(g) (August 2001). *In re Swinehart*, 439 F.2d 210, 169 USPQ 226 (CCPA 1971). *In re Venezia*, 530 F.2d 956, 189 USPQ 149 (CCPA 1976).

Also with regard to part 3D, the Appellants respectfully maintain that neither of the applied references disclose or suggest a data store including stored user data corresponding to a <u>plurality</u> of users, as previously discussed in more detail above. As previously discussed, Atkins compares each single user's input against only that single user's stored data. Atkins does not resolve first identity data or second identity data from a data store which includes data related to a plurality of users, especially a plurality of merchant users.

With regard to part 3E, the Appellants respectfully disagree with the Office's basis for combining references. The Office has not established that all the recited features and relationships are known in the prior art. That is, the record lacks substantial evidence support. *In*

re Zurko, supra. Since the Office has not produced a prima facie case, the Appellants are under no obligation to submit evidence of nonobviousness. MPEP § 2142.

Furthermore, an obviousness rejection cannot be based on a combination of features in references if making the combination would result in destroying the utility or advantage of the device shown in the prior art reference, such as in the current situation. *In re Fine*, supra.

Additionally, since the Action does not explain the rejections with reasonable specificity it also procedurally fails to establish a *prima facie* case of obviousness. *Ex parte Blanc*, supra.

Also, the prior art does not suggest the desirability of the combination (MPEP § 2143.01). The Action is devoid of any teaching, suggestion, or motivation for combining the references to have produced the recited invention. The only suggestion for the recited features and relationships is found in Appellants' own novel disclosure. The attempted combination of references (and the rejections) is based on hindsight reconstruction of Appellants' claimed invention, which is legally impermissible and does not constitute a valid basis for a finding of obviousness. *In re Fritch*, supra.

Nevertheless, even if it were somehow possible for the references to have disclosed certain features as alleged, it still would not have been obvious to have combined the references as alleged. Additionally, even if it were somehow possible to combine these references (which it isn't) this would not render the resultant combination obvious because the prior art does not suggest the desirability of the combination. The Action is devoid of any teaching, suggestion, or motivation for combining the references to have produced the recited invention. Furthermore, even if it were somehow possible for the references to be combined as alleged (which it isn't), the resultant combination still would not have produced Appellants' claimed invention. As

previously discussed in more detail above, it would not have been obvious to one having ordinary skill in the art to have modified Lipkin with the secondary references to have produced the claimed invention. Thus, Appellants respectfully submit that the 35 U.S.C. § 103(a) rejections should be withdrawn.

CONCLUSION

Each of Appellants' pending claims specifically recites features, relationships, and/or steps that are neither disclosed nor suggested in any of the applied art. Furthermore, the applied art is devoid of any teaching, suggestion, or motivation for combining features of the applied art so as to produce the recited invention. For these reasons it is respectfully submitted that all the pending claims are allowable.

Respectfully submitted,

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APPENDIX

CLAIMS

1. Apparatus comprising:

a financial transaction machine, wherein the machine includes a customer user side and a merchant user side, wherein the customer user side includes a sheet opening, wherein the merchant user side includes a sheet opening, wherein the machine further includes an imaging device providing image input signals, and an audio input device providing audio input signals, and at least one transaction function device, whereby a merchant user adjacent to the merchant user side of the machine causes image input signals to be generated and the voice of the merchant user causes audio input signals to be generated;

a processor, the processor being in operative connection with the imaging device, the audio input device, and the transaction function device, the processor also being in operative connection with a data store, wherein the data store includes data corresponding to a plurality of merchant users, the merchant user data for each merchant user including identity data corresponding to the merchant user, image data corresponding to an appearance feature of the merchant user, and voice data corresponding to a voice feature of the merchant user;

wherein the processor is operative responsive to the image input signals to resolve first identity data, and the processor is operative responsive to the audio input signals to resolve second identity data, and wherein the processor is operative to compare the first and second identity data for a level of correlation and to enable merchant user operation of the transaction function device when the level of correlation is reached.

- 2. The apparatus according to claim 1 wherein the machine includes a sensing device, wherein the sensing device is operative to sense the merchant user in proximity to the machine, and wherein the sensing device is in operative connection with the processor, and wherein the processor is operative to resolve the first identity data responsive to the sensing device sensing the merchant user in proximity to the machine.
- 3. The apparatus according to claim 1 wherein the machine includes an output device, and wherein the output device is in operative connection with the processor, and wherein the processor is operative to prompt the merchant user to speak through prompt outputs presented through the output device, whereby when the merchant user speaks audio input signals are generated.
- 4. The apparatus according to claim 3 wherein the output device includes a display.
- 5. The apparatus according to claim 3 wherein the output device includes a speaker.

- 6. The apparatus according to claim 5 wherein the data store further includes audio output data corresponding to audio outputs, and wherein the output device prompts the merchant user through audio messages.
- 7. The apparatus according to claim 1 wherein the machine further comprises an output device and a manually actuatable input device and wherein when the level of correlation is not reached the processor is operative to prompt a merchant user through the output device to operate the manually actuatable input device.
- 8. The apparatus according to claim 7 wherein the manually actuatable input device includes a card reader, wherein the merchant user is prompted to input a machine readable card associated with the merchant user in the card reader.
- 9. The apparatus according to claim 8 wherein the merchant user data further includes account data wherein the account data includes at least one account associated with each merchant user, and wherein the machine readable card includes account identifying data corresponding to an account associated with the merchant user of the card, and wherein the card reader provides card input signals responsive to reading the card, and wherein the processor is operative to resolve the account of the merchant user responsive to the account identifying data.

- 10. The apparatus according to claim 9 wherein the machine includes a keypad, and wherein the processor is operative responsive to resolving the merchant user account data to operate the output device to prompt the merchant user to input a code at the keypad, wherein the keypad generates keypad input signals responsive to the merchant user inputting the code at the keypad, and wherein the processor is operative to enable merchant user operation of the transaction function device responsive to the keypad input signals corresponding to input by the merchant of a predetermined code.
- 11. The apparatus according to claim 1 wherein the transaction function device includes a currency dispenser.
- 12. The apparatus according to claim 1 and further comprising an input terminal in operative connection with the processor, wherein the input terminal includes a further imaging device and a further audio input device, wherein the merchant user image data and user voice data is input through the input terminal.
- 13. The apparatus according to claim 1 wherein the machine includes a sensing device, wherein the sensing device is operative to sense the merchant user in proximity to the machine and wherein the sensing device is in operative connection with the processor, and wherein the processor is operative to cease merchant user operation of the transaction function device responsive to the sensing device ceasing to sense the merchant user in proximity to the machine.

14. A method of operation of an apparatus comprising the steps of:

providing a financial transaction machine, wherein the machine includes a customer user side and a merchant user side, wherein the customer user side includes a sheet opening, wherein the merchant user side includes a sheet opening,

storing in a data store in operative connection with a processor, merchant user data for a plurality of merchant users, said merchant user data including:

identity data corresponding to an identity of each merchant user;

image data corresponding to an appearance feature of each merchant user; and

voice data corresponding to a voice feature of each merchant user;

and thereafter in any order further comprising the steps of:

acquiring with an imaging device on the transaction machine an appearance feature of a merchant user adjacent to the machine;

resolving first user identity data with said processor from said appearance feature and the image data in the data store;

receiving with an audio input device on the transaction machine a voice feature of the merchant user adjacent the machine;

further resolving second user identity data with the processor from the voice feature and the voice data in the data store;

and thereafter further comprising:

comparing the first and second user identity data with the processor to determine if such data corresponds to a single merchant user; and

enabling merchant user operation of a transaction function device on the machine when the first and second identity data corresponds to a single merchant user.

The method according to claim 14 wherein the storing step further comprises storing for each of a plurality of merchant users manual input data, and wherein if in the comparing step the first and second identity data do not correspond to a single merchant user, and before the enabling step further comprising the steps of:

prompting the merchant user through an output device at the machine to make an input through a manually actuatable input device on the machine; and further comparing the data input by the merchant user through the input device to manual input data in the data store, wherein correspondence of the data resolves the identity of a single merchant user.

- 16. The method according to claim 14 wherein the storing step comprises prompting a merchant user through an input terminal to provide at least one of the image data or voice data.
- 17. The method according to claim 14 wherein the financial transaction machine further includes a sensing device wherein the sensing device enables sensing the merchant user in proximity to the machine, and further comprising the step of preventing merchant user operation of the transaction function device responsive to the merchant user ceasing to be sensed in proximity to the machine.

18. Apparatus comprising:

a transaction machine, the machine including a customer user side and a merchant user side, wherein the customer user side includes a sheet opening, wherein the merchant user side includes a sheet opening, the machine further including a characteristic input device for sensing at least one of a physical or vocal feature of a merchant user adjacent the machine, a manual input device, and a transaction function device;

a processor in operative connection with a data store, the processor in operative connection with the characteristic input device and the manual input device, and wherein the data store includes for each of a plurality of authorized merchant users, feature data representative of the feature associated with the merchant user, and input data associated with a manual input corresponding to the merchant user, and wherein the processor is operative to determine if feature data input through the characteristic input device by a merchant user in proximity to the machine corresponds to feature data associated with one of the plurality of authorized merchant users, and if so to enable merchant user operation of the transaction function device; and if not, to determine if manual input by the merchant user through the manual input device on the machine corresponds to the input data associated with one of the plurality of authorized merchant users and if so to enable merchant users and if so to enable merchant users and if so to

The apparatus according to claim 18 wherein the feature data includes data representative of both physical and vocal features of a plurality of authorized merchant users, and wherein the feature of the merchant user at the machine must correspond to both the physical and vocal data of one authorized merchant user, and wherein upon such correspondence the transaction function device is enabled to be operated.

- 20. The apparatus according to claim 19 wherein the manual input device includes a card reader, whereby the card reader reads a card including identifying card data corresponding to a merchant user.
- 21. The apparatus according to claim 20 wherein the manual input device further includes a keypad, wherein the merchant user is enabled to input a code corresponding to the merchant user through the keypad, and wherein the transaction function device is enabled to be operated when the code and the identifying card data both correspond to the authorized merchant user.
- 22. The apparatus according to claim 18 wherein the machine includes an audio output device, and wherein the audio output device is in operative connection with the processor, wherein the processor operates the audio output device to prompt the merchant user to provide an input.
- 23. The apparatus according to claim 22 and further comprising a suppression input device, wherein the merchant user is selectively enabled to suppress operation of the audio output device, whereby a merchant user is enabled to selectively conduct a silent transaction.
- 24. The apparatus according to claim 23 wherein the processor is operative responsive to selection of the suppression device to store feature data concerning the merchant user in the data store.

25. Apparatus comprising:

a transaction machine, wherein the machine includes a customer user side and a merchant user side, wherein the customer user side includes a sheet opening, wherein the merchant user side includes a sheet opening, wherein the machine further includes an imaging device providing image input signals, and an audio input device providing audio input signals, and at least one dispenser device, whereby a merchant user adjacent to the machine causes image input signals to be generated and the voice of the merchant user causes audio input signals to be generated;

a processor, the processor in operative connection with the imaging device, the audio input device and the dispenser device, the processor also being in operative connection with a data store, wherein the data store includes data corresponding to a plurality of merchant users, the merchant user data for each merchant user including identity data corresponding to the merchant user, image data corresponding to an appearance feature of the merchant user, and voice data corresponding to a voice feature of the merchant user;

wherein the processor is operative responsive to the image input signals to resolve first identity data, and the processor is operative responsive to the audio input signals to resolve second identity data, and wherein the processor is operative to compare the first and second identity data for a level of correlation and to enable merchant user operation of the dispenser device when the level of correlation is reached.

26. Apparatus comprising:

a transaction machine, wherein the machine includes a customer user side and a merchant user side, wherein the customer user side includes a sheet opening, wherein the merchant user side includes a sheet opening, wherein the machine further includes an imaging device providing image input signals, and an audio input device providing audio input signals, and at least one dispenser device, whereby a merchant user adjacent to the machine causes image input signals to be generated and the voice of the merchant user causes audio input signals to be generated;

a processor, the processor in operative connection with the imaging device, the audio input device and the dispenser device, the processor also being in operative connection with a data store, wherein the data store includes stored merchant user data corresponding to a plurality of merchant users, the merchant user data for each merchant user including identity data corresponding to the merchant user, image data corresponding to an appearance feature of the merchant user, and voice data corresponding to a voice feature of the merchant user;

wherein the processor is operative responsive to the stored merchant user data for a plurality of users and the image input signals to resolve first identity data, and the processor is operative responsive to the stored merchant user data for a plurality of users and the audio input signals to resolve second identity data, and wherein the processor is

operative to compare the first and second identity data for a level of correlation and to enable merchant user operation of the dispenser device when the level of correlation is reached.

27. Apparatus comprising:

a transaction machine, wherein the machine includes a customer user side and a merchant user side, wherein the customer user side includes a sheet opening, wherein the merchant user side includes a sheet opening, wherein the machine further includes an imaging device providing image input signals, and an audio input device providing audio input signals, and at least one dispenser device, whereby a merchant user adjacent to the machine causes image input signals to be generated and the voice of the merchant user causes audio input signals to be generated;

a processor, the processor in operative connection with the imaging device, the audio input device and the dispenser device, the processor also being in operative connection with a data store, wherein the data store includes stored merchant user data corresponding to a plurality of authorized merchant users, the merchant user data for each merchant user including image data corresponding to an appearance feature of the merchant user and voice data corresponding to a voice feature of the merchant user;

wherein the processor is operative responsive to the image input signals, the audio input signals and the stored merchant user data for a plurality of merchant users, to resolve identity data, and where when the resolved identity data corresponds to one of the authorized merchant users the processor enables merchant user operation of the dispenser device.

28. Apparatus comprising:

a transaction machine, wherein the machine includes a customer user side and a merchant user side, wherein the customer user side includes a sheet opening, wherein the merchant user side includes a sheet opening, wherein the machine further includes an imaging device providing image input signals, and an audio input device providing audio input signals, and at least one output device, whereby a merchant user adjacent to the machine causes image input signals to be generated and the voice of the merchant user causes audio input signals to be generated;

a processor, the processor in operative connection with the imaging device, the audio input device and the output device, the processor also being in operative connection with a data store, wherein the data store includes data corresponding to a plurality of merchant users, the merchant user data for each merchant user including identity data corresponding to the merchant user, image data corresponding to an appearance feature of the merchant user, and voice data corresponding to a voice feature of the merchant user;

wherein the processor is operative responsive to the image input signals and the audio input signals to resolve merchant user identity data corresponding to a particular merchant user to operate the output device.

29. Apparatus comprising:

a transaction machine, wherein the machine includes a customer user side and a merchant user side, wherein the customer user side includes a sheet opening, wherein the merchant user side includes a sheet opening, wherein the machine further includes at least one of an imaging device providing image input signals or an audio input device providing audio input signals, the machine further including at least one output device;

a processor, the processor in operative connection with the at least one imaging device or audio input device, and the output device, the processor also being in operative connection with a data store, wherein the data store includes user data corresponding to a plurality of merchant users, the user data for each merchant user including identity data corresponding to the merchant user, and at least one of image data corresponding to an appearance feature of the merchant user or voice data corresponding to a voice feature of the merchant user;

wherein the processor is operative responsive to at least one of the image input signals or the audio input signals, and the stored user data, to resolve user identity data corresponding to a particular merchant user to enable the output device to provide at least one output.

30. Apparatus comprising:

a transaction machine, wherein the machine includes a customer user side and a merchant user side, wherein the customer user side includes a sheet opening, wherein the merchant user side includes a sheet opening, wherein the machine further includes at least one of an imaging device providing image input signals or an audio device providing audio input signals, the machine further including at least one transaction function device;

a processor, wherein the processor is in operative connection with the at least one imaging device or audio input device, and wherein the processor is further in operative connection with the transaction function device and a data store, wherein the data store includes for each of a plurality of authorized merchant users, at least one of image data corresponding to an appearance feature of the merchant user or voice data corresponding to a voice feature of the merchant user; and

wherein the processor is operative responsive to at least one of the image input signals or audio input signals to determine if a user causing the image or audio input signals to be generated is an authorized merchant user, and if so, to enable merchant user operation of the transaction function device.

31. Apparatus comprising:

a transaction machine, wherein the machine includes a customer user side and a merchant user side, wherein the customer user side includes a sheet opening, wherein the merchant user side includes a sheet opening, wherein the machine further includes an imaging device providing image input signals and a transaction function device;

a processor, wherein the processor is in operative connection with the imaging device, and wherein the processor is further in operative connection with the transaction function device and a data store, wherein the data store includes for each of a plurality of authorized merchant users, image data corresponding to an appearance feature of the merchant user; and

wherein the processor is operative responsive to the image input signals to determine if a user causing the image input signals is an authorized merchant user, to enable the authorized merchant user operation of the transaction function device.

32. Apparatus comprising:

a transaction machine, wherein the machine includes a customer user side and a merchant user side, wherein the customer user side includes a sheet opening, wherein the merchant user side includes a sheet opening, wherein the machine further includes an audio input device providing audio input signals and a transaction function device;

a processor, wherein the processor is in operative connection with the audio input device, and wherein the processor is further in operative connection with the transaction function device and a data store, wherein the data store includes for each of a plurality of authorized merchant users, voice data corresponding to a voice feature of the merchant user; and

wherein the processor is operative responsive to the audio input signals to determine if a user causing the audio input signals is an authorized merchant user, to enable the authorized merchant user operation of the transaction function device.

33. The apparatus according to claim 30 and further comprising:

a chest portion, wherein the chest portion includes a first side corresponding to the customer user side and a second side corresponding to the merchant user side;

a sheet inlet opening in the merchant user side of the chest portion;

a first sheet outlet opening in the merchant user side of the chest portion; and

a second sheet outlet opening in the customer user side of the chest portion.

- 34. The apparatus according to claim 33 and further comprising:
 - a housing in supporting connection with the chest portion;
 - a customer interface in supporting connection with the housing; and
 - a merchant user interface in supporting connection with the housing.
- 35. The apparatus according to claim 34 wherein the chest portion comprises a sheet storage area.